## In the Claims:

- 1-15. (Cancelled)
- 16. (Currently Amended) A method of forming a semiconductor device, the method comprising:

forming a gate electrode <u>having sidewalls</u> on a region in a substrate, the region in the substrate having a first conductivity type;

forming a notched spacer alongside the gate electrode <u>sidewalls</u> such that a thickness of the notched spacer <u>extending</u> alongside the gate electrode <u>sidewalls</u> has a first thickness in an <u>upper portion</u> and has a second lesser thickness thereby forming a notch in a lower portion of the <u>notched spacer adjacent to the surface of the substrate</u> thinner near the substrate, the notched spacer comprising a single homogenous layer;

performing a first ion implant at an oblique angle to the substrate so as to implant ions
beneath the gate electrode wherein [[only]] the gate electrode and the notched spacer act as
masks during the first ion implant, the first ion implant using ions of the first conductivity type;
and

performing one or more second ion implants using ions of a second conductivity type.

17. (Currently Amended) The method of claim 16, wherein the step of forming a notched spacer comprises forming a first layer and a second layer, forming a mask out of the second layer on the first layer such that the <u>upper portion of the first layer alongside the gate electrode is covered by the mask and a lower portion at the corner formed between the surface of the substrate and the sidewall of the gate electrode is not covered by the mask, isotropically etching</u>

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the first layer such that the <u>portion of the</u> first layer along a surface of the substrate next to the gate electrode <u>not covered by the mask</u> is removed, and removing the mask.

- 18. (Original) The method of claim 17, wherein the mask is formed of silicon nitride.
- 19. (Original) The method of claim 17, wherein the mask is formed of silicon oxide.
- 20. (Cancelled)
- 21. (Previously Presented) The method of claim 16, wherein the step of performing one or more second ion implants is performed at an angle normal to a surface of the substrate.
- 22. (Original) The method of claim 16, wherein the notched spacer is formed of silicon dioxide.
- 23. (Original) The method of claim 16, wherein the notched spacer is formed of silicon nitride.

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24. (Currently Amended) A method of forming a semiconductor device, the method comprising:

forming a gate electrode in a region on a substrate, the region of the substrate having a first conductivity type;

forming a first layer <u>having a first thickness</u> over the substrate and the gate electrode; forming a second layer over the first layer;

removing a portion of the second layer such that a spacer mask is formed on the first layer on a side of the gate electrode, an upper portion of the first layer remaining covered by the spacer mask and a portion of the first layer along the surface of the substrate and extending up the lower sidewall portion of the gate electrode being exposed;

<u>isotropically</u> etching the first layer to form a notched spacer <u>in the first layer having a</u>

<u>second thickness less than the first thickness</u> wherein the spacer mask acts as a mask, and

wherein the etching removes at least a portion of the <u>uncovered</u> first layer along a surface of the

substrate <u>and in the corner formed by the sidewall of the gate electrode and the surface of the</u>

<u>substrate</u>, thereby forming a notch in the notched spacer <u>in the corner formed by the sidewall of</u>

the gate electrode and the surface of the <u>substrate</u> alongside the gate electrode near the <u>substrate</u>;

removing the spacer mask;

performing a first ion implant after the spacer mask has been removed, the first ion implant using ions of the first conductivity type implanted at an oblique angle to the surface of the substrate and implanting ions beneath the gate electrode; and

performing one or more second ion implants using ions of a second conductivity type.

## 25. (Cancelled)

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- 26. (Original) The method of claim 24, wherein the step of performing one or more second ion implants are performed at an angle normal to the surface of the substrate.
- 27. (Original) The method of claim 24, wherein the first layer is formed of silicon dioxide.
- 28. (Original) The method of claim 24, wherein the second layer is formed of silicon nitride.
- 29. (Withdrawn) A method of forming a semiconductor device, the method comprising: forming a gate electrode on a region in a substrate, the region in the substrate having a first conductivity type;

forming a first layer over the substrate and the gate electrode;

forming a second layer over the first layer;

removing a portion of the second layer such that a spacer mask is formed on the first layer on a side of the gate electrode;

etching the first layer to form a notched spacer wherein the spacer mask acts as a mask, the etching removing substantially all of a portion of the first layer along a surface of the substrate adjacent the gate electrode;

removing the spacer mask;

performing a first ion implant after the spacer mask has been removed, the first ion implant using ions of the first conductivity type; and

performing one or more second ion implants using ions of a second conductivity type.

30. (Withdrawn) The method of claim 29, wherein the step of performing a first ion implant is performed by implanting ions at an oblique angle to the substrate such that impurities of the first conductivity type are implanted in the substrate below the gate electrode.

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- 31. (Withdrawn) The method of claim 29, wherein the step of performing one or more second ion implants are performed at an angle normal to the surface of the substrate.
- 32. (Withdrawn) The method of claim 29, wherein the first layer is formed of silicon dioxide.
- 33. (Withdrawn) The method of claim 29, wherein the second layer is formed of silicon nitride.

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